

Horn Butte Fire N352  
Emergency Fire Rehabilitation Plan  
and  
Environmental Assessment  
OR-054-01-001

## INTRODUCTION

This Emergency Fire Rehabilitation Plan (EFR) Plan and EA will address N352 which is close to 10 miles EastSoutheast of Arlington, OR. N352 burned approximately 3,400 acres of public lands administered by the BLM Prineville Field Office and the total burn included about 19,000 acres (Refer to Map 1). The fire included a large portion of public lands in three grazing allotments. The Horn Butte Allotment (2571) was the primary allotment with 2,660 acres of public land burned, Hi-Meadows Allotment (2644) with 640 acres, and the Pebble Springs Allotment (2661) with 80 acres of public land burned. N352 started on July 21, 2000, by lightning and was controlled on July 22, 2000.

### I. PURPOSE AND NEED

The fire occurred in a Wyoming big sagebrush / Bluebunch wheatgrass vegetation community. The purpose of the proposed action is to re-establish desirable perennial species on the sites dominated by annual vegetation in order to retard the invasion of noxious weed species. Establishing perennial grasses would also reduce the amount of water and wind caused soil erosion and provide for quality long-billed curlew nesting habitat. This action is needed because the native grass and shrub seed source is limited by competitive annual grass and noxious weeds. The long-billed curlew nesting habitat would degrade and fire frequency would continue to increase if the trend of annual grass and noxious weed expansion is not acted upon.

### II. RELATIONSHIP TO PLANNING

The proposed action is consistent with two current land use plans: the Two Rivers Resource Management Plan and Record of Decision, dated June 1986, as well as the Horn Butte Long-billed Curlew Management Plan and Record of Decision, dated March 1989.

### III. DESCRIPTION OF ALTERNATIVES

#### A. Proposed Action

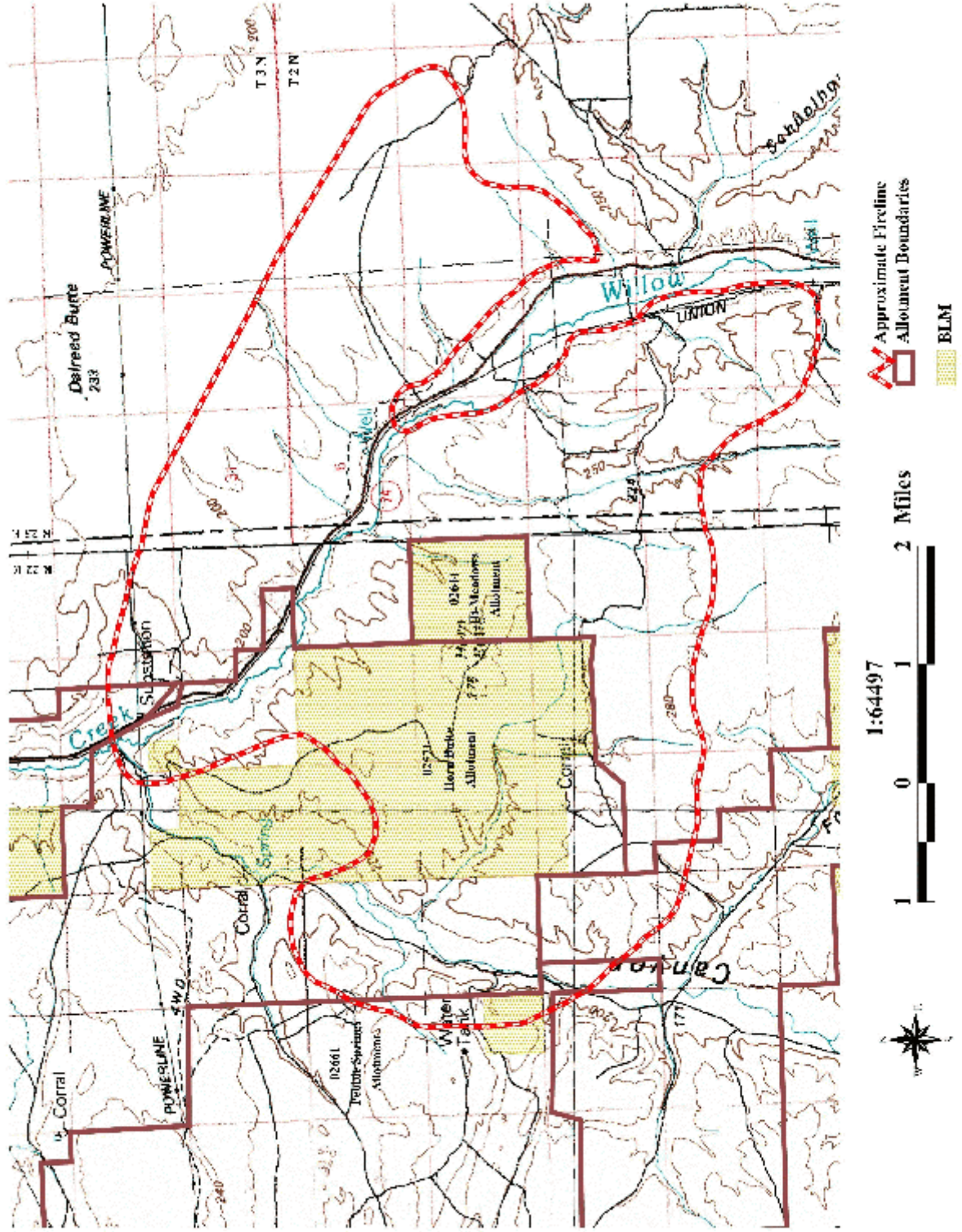
The proposed treatments of seeding, noxious weed control, fence repair, and livestock exclusion would facilitate moving the system toward a mid or late seral condition. The establishment of desirable vegetation would also improve the structure and diversity of the vegetation in the system. The proposed action would enhance forage, browse, and nesting habitat for wildlife species (namely the long-billed curlew) and decrease the intensity and frequency of future wildfires.

#### 1. Seeding

Approximately 1200 acres inside the burn area would be seeded to native grass species using helicopter on soils unfit for rangeland drill at the seed and application rate listed in Table A. Refer to Map 2 for the locations of the areas to be seeded to native grasses. Native shrub species would be seeded by helicopter application to 400 acres scattered throughout the burn area (See Table B). Seeding area selection criteria for native shrub species would generally be areas of deeper sandy soils along north facing slopes and depressions. Seeding would occur between January 1, 2001 and February 15, 2001 to avoid disturbance to Washington ground squirrels (*Spermophilus*

*washingtoni*) and long-billed curlew (*Numenius americanus*).

MAP 1: Horn Butte Fire N352



MAP 2: Horn Butte Fire N352  
Proposed seeding

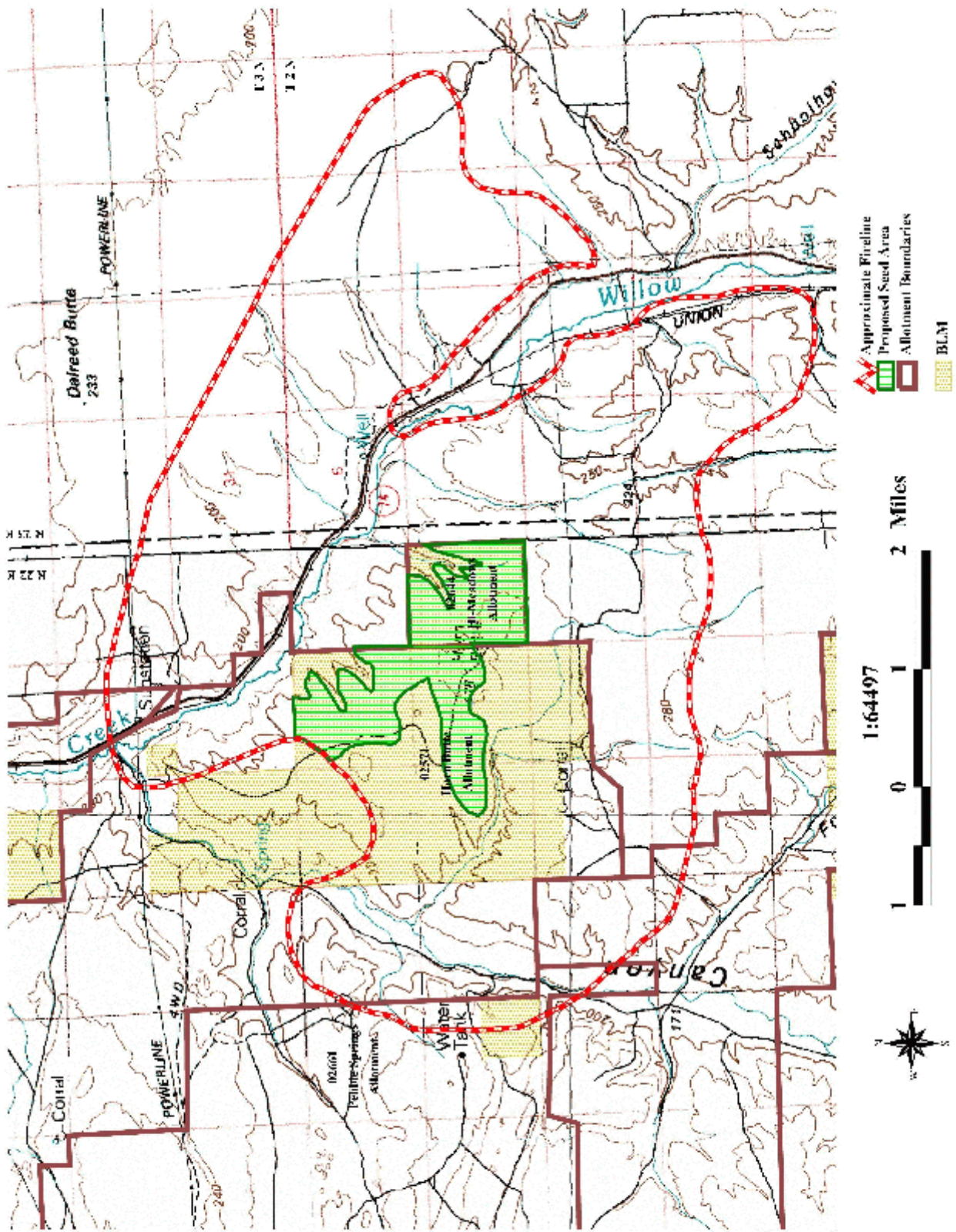


Table A: Native Grass Seed Mix and Rate  
Horn Butte Fire N352

Species	Upland Mix (lbs/acre)
Bluebunch Wheatgrass ( <i>Agropyron spicata</i> , cultivar Secar)	3.0
Bluebunch Wheatgrass ( <i>Agropyron spicata</i> , cultivar Whitmar)	3.0
Sherman Big Bluegrass ( <i>Poa ampla</i> , cultivar Sherman)	4.0
Sand Dropseed ( <i>Sporobolus cryptandrus</i> )	0.5
Basin Wildrye ( <i>Elymus cinereus</i> , cultivar Magnar and/or Trailhead)	0.5
Thickspike Wheatgrass ( <i>Agropyron dasystachyum</i> , cultivar Bannock)	2.0
<b>Total:</b>	13.0

Table B: Native Shrub Seed Mix and Rate  
Horn Butte Fire N352

Species	Shrub Mix (lbs/acre)
Antelope Bitterbrush ( <i>Purshia tridentata</i> )	1.0
Big Sagebrush ( <i>Artemisia tridentata</i> , cultivar Wyoming)	1.0
Big Sagebrush ( <i>Artemisia tridentata</i> , cultivar Basin)	0.25
Rice Hulls	1.75
<b>Total:</b>	4.0

2. Herbicide Application

Mechanical application of 1/2 lb/ac ai picloram formulation to 150 scattered acres throughout the fire area dominated by Yellow starthistle and Diffuse knapweed. Application would be in accordance with the Prineville District Integrated Weed Management EA No. OR-053-3-62. Spraying would occur in the Spring of 2001 and 2002 when the Yellow starthistle has started to grow, but no spraying would occur between March 15 and May 30 to avoid impacts to nesting long-billed curlews.

3. Fence Repair (Common to all Alternatives)

Damaged wood fence posts and wire would be replaced or repaired as needed. Total fence reconstruction is not needed.

4. Grazing

All grazing activities will be excluded from burn areas for one growing season and from seeded areas for two growing seasons. Grazing preference for the Horn Butte Allotment would be reduced from 836 to 403 AUMs in the first year and to 736 the second year, in the Hi Meadows Allotment, the grazing preference would be reduced from 98 to 0 AUMs in both years, and in the Pebble Springs Allotment, the grazing preference would be reduced from 53 to 40 AUMs in the first year.

B. Alternative 1

Alternative 1 is the same as the preferred alternative with the exception that no spraying of noxious weeds would occur.

C. Alternative 2 (No Action)

No Action. Do not seed selected burn areas, spray for noxious weed control, or exclude livestock from the burn area. Fence repair would be required for livestock control.

IV. EVALUATION AND ANALYSIS

A. Affected Environment

1. Water and Soil

The important aspects of post-fire hydrology are typically water retention and water quality. High intensity burns associated with heavy fuel loads result in hydrophobic soil conditions which may decrease infiltration rate and limit water holding capacity. The alteration of these parameters result in the inability of the burned area to absorb rainfall and overland flow may increase. Upland fuel loads were light and the subsequent burns low intensity, thus, fire induced hydrophobic characteristics are minimal.

From a soil and water standpoint, cover is imperative. Immediate revegetation of the early seral sites and areas with a presence of noxious weeds would 1) increase interception, 2) shorten the time for reintroduction of litter which will increase water holding capacity, and 3) reduce rain droplet kinetic energy prior to soil contact. In addition, upland revegetation is the most effective manner to reduce potential sediment recruitment.

Sagehill is the dominant soil type in the Horn Butte burn area. Available water capacity is three to eight inches with water supplying capacity of five to seven inches. Typically, the eight inches of the surface layer and upper 14 inches of subsoil are brown fine sandy loam. The lower three inches is pale brown very fine sandy loam and the upper ten inches of substratum is light

brownish gray silt loam. The lower part to a depth of 60 inches or more is light gray silt loam. Permeability is moderate. Effective rooting depth is 60 inches but is somewhat restricted in many profiles due to waterlaid silt.

Runoff is slow to medium and the hazard of water erosion is slight to moderate. The risk of soil blowing is high.

2. Vegetation

Ecological status information for uplands was collected during 1980 for the Two Rivers RMP/EIS by the Ecological Site Inventory method (ESI). Overall, condition for the Horn Butte area is mid-seral with some in the early seral stage. The dominant range site is Sagehill with the dominant vegetation type Artemisia tridentata wyomingensis (Artrw) / Agropyron spicatum (Agsp). Vegetation types also represented are Artrw / Stipa comata (Stco) and Purshia tridentata (Putr)/Agsp. Habitat types vary within the burn area from sand dunes to sagebrush bottoms. Three species which exhibit a major influence on the area but were not inventoried in the vegetation type information are Cheatgrass (*Bromus tectorum*), Diffuse knapweed (*Centaurea diffusa*), and Yellow starthistle (*Centaurea solstitialis*). Cheatgrass and the two noxious weed species comprise a major part of the total biomass and are highly invasive in nature.

Vegetation on surrounding private uplands varies from wheat fields to native range.

3. Wildlife

Species observed at Horn Butte are the long-eared owl, redtail hawk, mule deer, and mourning dove. Introduced species known to occur in the area are Hungarian partridge and pheasant. A complete list of species potentially in the area can be found in the Two Rivers Resource Management Plan (RMP).

4. Special Status Species

a. Wildlife

Special status or sensitive wildlife species that occur in the vicinity of the burned area based on recent records, regional data, and county specific documentation include: long-billed curlew (*Numenius americanus*), burrowing owl (*Athene cunicularia*), Ferruginous hawk (*Buteo regalis*), Swainson's hawk (*Buteo swainsoni*), loggerhead shrike (*Lanius ludovicianus*), Western bluebird (*Sialia mexicana*), Grasshopper sparrow (*Ammodramus savannarum*), Sage sparrow (*Amphispiza belli*), Northern sagebrush lizard (*Sceloporus graciosus graciosus*), and Washington ground squirrel (*Spermophilus washingtoni*).

All of the public land burn areas fall within the Horn Butte ACEC. This area was

designated as an ACEC to conserve lands and maintain population levels of the long-billed curlew to prevent its formal listing. For more information concerning the Horn Butte ACEC and the long-billed curlew please reference the Horn Butte Long-Billed Curlew Management Plan, EA OR-050-7-37.

b. Botany

No special status plants are known to occur in the Horn Butte ACEC. Two plants of interest have been documented, *Astragalus sclerocarpus* (woodypod milkvetch) and *Astragalus succumbens* (Columbia milkvetch). Both are included on List 4 (watch) of the Oregon Natural Heritage Database publication Rare, Threatened and Endangered Species of Oregon (March 1998). Management direction for "watch" species is to document their occurrence as they are found, but no other actions, including avoidance or monitoring, are required.

5. Grazing

The Horn Butte Allotment (2571) is the primary one effected by the fire with 2,660 acres of public land burned, Hi-Meadows Allotment (2644) with 640 acres, and the Pebble Springs Allotment (2661) with 80 acres of public land burned. The pre-eminent impact to all allotments is the damage of livestock control fences which would be needed to keep livestock from areas which may be seeded. It is believed that the fences can be repaired, thus eliminating the need for fence replacement.

6. Archeological and Paleontological Resources

There are known archaeological and historical resources in the vicinity of the burn area, but none are known to occur within the boundaries of the area proposed for seeding. There are no known paleontological localities in the vicinity of the burn area.

7. Native American Indian Uses

The BLM knows of no known Native American Indian religious sites or traditional cultural properties within the proposed seeding area.

8. Climate

The area climate consists of hot summer days, cool summer nights, and winters which are generally not severe. Average winter temperature in Condon is 33 degrees (F). Average summer temperature in Condon is 64 degrees (F). Total annual precipitation is 9 inches in Arlington and 14 inches at Condon. Thirty percent of the precipitation fall between April and September. The 6 hour -2 year event is 0.6" of rainfall and the 2 year-24 hour event is 1.2".

9. ACEC's

The Horn Butte Long-Billed Curlew Management Plan, EA OR-050-7-37, established the Horn Butte ACEC for the protection and enhancement of long-billed curlew nesting habitat.

B. Environmental Impacts of the Proposed Action and Alternatives

1. Proposed Action:

a. Seeding

The seed mix for the 1200 acres will help move early seral and noxious weed dominated sites towards mid to late seral stages. The seeded grass and shrub species establish quickly and are competitive with the existing annual and noxious weed vegetation. The seeded species would form a more heterogenous plant community thus providing for the necessary nesting and cover needed by the long-billed curlew during the spring months. The rangeland drill application method would have short term impacts to the seeding area in the form of tire tracks and approximately one inch furrows. In addition, seeding a diverse plant community to compete with noxious weeds and cheatgrass would create a more natural viewshed by restoring the area to native bunchgrasses and shrubs with less bare ground.

b. Fences

Fence repair is not expected to have any significant environmental impacts. Some soil compaction and vegetation loss would occur along existing fence lines during the repair phase, but these effects would last less than two years. All existing fences will function to control livestock and allow for the establishment of the seeded species and recovery of the existing native plants.

c. Noxious Weed Control

The environmental impacts of *ai picloram* have been fully analyzed in EA No. OR-053-3-62. Picloram is a broadleaf selective herbicide which will kill many native and introduced broadleaf plants within the spray area. However, any native plants in the immediate area of invasive noxious weeds such as Yellow starthistle and Diffuse knapweed would eventually be out-competed for resources and die if left alone. No spraying will occur between March 15 and May 30 to avoid disturbing the nesting habits of long-billed curlews.

d. Grazing

Exclusion of livestock from the seeded areas will allow for seedling establishment and seedling root development. Although in the short term, livestock ranchers would have 544 AUMs less feed the first year and 198 AUMs less feed the second year, the activities of seeding and noxious weed control will increase quality and quantity of forage grasses in the burned allotments.

e. ACEC's

The Horn Butte Long-Billed Curlew Management Plan, EA OR-050-7-37, established the Horn Butte ACEC for the protection and enhancement of long-billed curlew nesting habitat. All rehabilitation activities are timed not to impact the long-billed curlew's nesting habits and habitat.

2. Alternative 1

a. Seeding

The seed mix for the 1200 acres will help move early seral and noxious weed dominated sites towards mid to late seral stages. The seeded grass and shrub species establish quickly and are competitive with the existing annual and noxious weed vegetation. The seeded species would form a more heterogenous plant community thus providing for the necessary nesting and cover needed by the long-billed curlew during the spring months. The rangeland drill application method would have short term impacts to the seeding area in the form of tire tracks and approximately one inch furrows. In addition, seeding a diverse plant community would create a more natural viewshed by restoring the area to native bunchgrasses and shrubs with less bare ground.

b. Fences

Fence repair is not expected to have any significant environmental impacts. Some soil compaction and vegetation loss would occur along existing fence lines during the repair phase, but these effects would last less than two years. All existing fences will function to control livestock and allow for the establishment of the seeded species and recovery of the existing native plants.

c. Noxious Weed Control

Yellow starthistle and Diffuse knapweed are both State of Oregon and Gilliam County designated noxious weeds. These introduced exotic plants do not have the natural enemies (diseases, insects or other plants) from their countries of origin to limit their ability to compete for nutrient or water resources. As a result these plants completely displace native grasses and shrubs, creating monocultures of little or no forage value to wildlife and livestock. These noxious weeds also grow from a single taproot with much

reduced soil holding capacity as compared to native bunchgrasses. In areas of Yellow starthistle and Diffuse knapweed monocultures, wind and water soil erosion is accelerated and sediment transfer to streams and rivers is very similar to bare ground conditions. The increased amount of sediment in streams and rivers in turn increases water temperatures and decreases water quality.

Increased noxious weed control activities are underway on neighboring private lands. If the BLM were not to control weeds in the burn area, noxious weed seed would spread from public lands onto adjacent private lands. The BLM would be deemed a “bad neighbor” for undermining private land weed control activities.

d. Grazing

Exclusion of livestock from the seeded areas will allow for seedling establishment and seedling root development. Although in the short term, livestock ranchers would have 544 AUMs less feed the first year and 198 AUMs less feed the second year, the activities of seeding and noxious weed control will increase quality and quantity of forage grasses in the burned allotments.

e. ACEC's

The Horn Butte Long-Billed Curlew Management Plan, EA OR-050-7-37, established the Horn Butte ACEC for the protection and enhancement of long-billed curlew nesting habitat. All rehabilitation activities are timed not to impact the long-billed curlew's nesting habits and habitat.

4. Alternative 2 (No Action)

a. Seeding

The areas identified as early seral condition are dominated by annual grasses and much of the mid seral areas have a presence of Yellow starthistle and Diffuse knapweed to varying degrees. Without an interspersed natural seed source for desired native perennial grasses in these early to mid seral sites, there would be increased dominance by Yellow starthistle, Diffuse knapweed, and Cheatgrass. Perpetuation of annual grasses and noxious weeds that do not provide the soil stability of the native perennial grasses would cause increased hill slope erosion and sedimentation of stream channels. All impacts of Cheatgrass and noxious weed vegetation would be detrimental to the protection of long-billed curlew nesting habitat.

b. Fences

Fence repair is not expected to have any significant environmental impacts. Some soil compaction and vegetation loss would occur along existing fence lines during the repair phase, but these effects would last less than two years. All existing fences will function to control livestock and allow for the establishment of the seeded species and recovery of the existing native plants.

c. Noxious Weed Control

Yellow starthistle and Diffuse knapweed are both State of Oregon and Gilliam County designated noxious weeds. These introduced exotic plants do not have the natural enemies (diseases, insects or other plants) from their countries of origin to limit their ability to compete for nutrient or water resources. As a result these plants completely displace native grasses and shrubs, creating monocultures of little or no forage value to wildlife and livestock. These noxious weeds also grow from a single taproot with much reduced soil holding capacity as compared to our native bunchgrasses. In areas of Yellow starthistle and Diffuse knapweed monocultures, wind and water soil erosion is accelerated and sediment transfer to streams and rivers is very similar to bare ground conditions. The increased amount of sediment in streams and rivers in turn increases water temperatures and decreases water quality.

Increased noxious weed control activities are underway on neighboring private lands. If the BLM were not to control weeds in the burn area, noxious weed seed would spread from public lands onto adjacent private lands. The BLM would be deemed a “bad neighbor” for undermining private land weed control activities.

d. Grazing

Allowing grazing to continue in the burn area for the years immediately following the burn would facilitate the expansion of annual grasses and noxious weeds. The areas of mid to late seral condition that are not dominated by noxious weeds would receive increased grazing pressure, thus weakening the plant’s ability to compete with the invasive grasses and weeds.

e. ACEC’s

The Horn Butte Long-Billed Curlew Management Plan, EA OR-050-7-37, established the Horn Butte ACEC for the protection and enhancement of long-billed curlew nesting habitat. Long-billed curlew nesting habitat would degrade if no improvements are to be implemented.

V. MITIGATION AND STIPULATIONS

None.

## VI. NO IMPACT ITEMS

The following items were considered, but will not be addressed because they will either not be affected or do not exist in the project areas.

- |                                       |                                |
|---------------------------------------|--------------------------------|
| 1. Air Quality                        | 7. Wetland / Riparian          |
| 2. Water Quality                      | 8. Wilderness                  |
| 3. Hazardous Wastes                   | 9. Wild and Scenic Rivers      |
| 4. Prime or Unique Agricultural Lands | 10. Environmental Coordination |
| 5. Flood Plains                       | 11. Environmental Justice      |
| 6. Solid Waste                        |                                |

## VII. RESIDUAL IMPACTS

Cumulative impacts of the proposed action would include vegetative improvements and soil stability on public lands within the project areas. Other than those items already addressed in this document, no mitigating measures are required for implementation of the proposed action.

## VIII. CONSULTATION/COORDINATION

### Internal:

Lyle Andrews, Range Conservationist  
Scott Cooke, Wildlife Biologist  
Mike Crumrine, Natural Resource Specialist  
Rick Demmer, Amphibians/Surface Protection Specialist  
Ron Halverson, T&E Plants  
Heidi Mottl, Recreation/Wilderness Specialist  
Craig Obermiller, Range Conservationist  
Brent Ralston, Fisheries Biologist  
Anna Smith, Hydrologist  
John Zancanella, Archeologist

### External:

Russ Morgan, Heppner District, ODFW  
Don Farrar, Gilliam County Weed Control

/s/ Craig Obermiller

Responsible Official

10/16/00

Date

/s/ Scott C. Cooke

Environmental Coordinator

10/16/00

Date

IX. EMERGENCY FIRE REHABILITATION FORMS

EMERGENCY FIRE REHAB PROJECT SUMMARY

Horn Butte Fire N352

Fire Name	Horn Butte Fire
Fire Number	N352
Fire Control Date	July 22, 2000
Acres BLM Burned	3,400 acres
Start of Rehab (Mo/Yr)	October 2000 (Planning)
Completion of Rehab (Mo/Yr)	June 2002
Miles of New Fence (temporary electric fence)	0.0 miles
Miles of Fence Rebuilt	1.0 miles
No. of Soil/Watershed Structures	0
Acres of Revegetated	1,200 acres
Acres of Burned Area Protected for Natural Regeneration	2,200 acres
Total Acres Rehabilitated	3,400 acres
Estimated Funding Current Year (FY00)	2,000 (Admin. & Planning)
Estimated Funding Second Year (FY01)	150,000 (Seeding & Weed Control)
Estimated Funding Third Year (FY02)	12,000 (Weed Control & Admin.)
TOTAL REHAB COSTS	164,000

/s/Craig Obermiller                      10/16/00  
 Responsible Official                      Date  
 Lower John Day Team

Review and Concurrence:

/s/Scott Cooke for                      10/16/00  
 Danny L. Tippy                      Date  
 Field Manager  
 Central Oregon Resource Area

# EMERGENCY FIRE REHAB PROCUREMENT INFORMATION

Horn Butte Fire N352

## Rangeland Drill and Aerial Seeding

Approximate acreage to be seeded	1,200 acres
Approximate starting date	January 1, 2001
Number of days to complete the work	50 days
Location of seed	Boise, ID, Seed Warehouse / Contract
Start of Rehab (Mo/Yr)	October 2000 (Planning)
Completion of Rehab (Mo/Yr)	June 2002
Miles of New Fence(temporary electric fence)	0
Miles of Fence Rebuilt	1.0
No. of Soil/Watershed Structures	0
Acres Reforestation	0
Acres of Revegetation	1,200
Acres of Burned Area Protected for Natural Regeneration	2,200
Total Acres Rehabilitated	3,400
Estimated Funding Current Year (FY00)	2,000 (Admin. & Planning)
Estimated Funding Second Year (FY01)	150,000 (Seeding & Weed Control)
Estimated Funding Third Year (FY02)	12,000 (Weed Control & Admin.)
TOTAL REHAB COSTS	164,000

# EMERGENCY FIRE REHAB

## Modified Cost / Risk Analysis

Horn Butte Fire N352

### Cost Analysis

Treatment	Cost
Revegetation	131,000
Noxious Weed Control	20,000
Protective Fence	2,000
Fence Maintenance (temporary electric fence)	0
Soil / Watershed Structures	0
All Other Costs (admn., clearances, monitoring, etc.)	11,000
<b>TOTAL</b>	<b>164,000</b>

### Risk Analysis

Probability of Rehabilitation Treatments Successfully Meeting EFR Objectives

Treatments	Units	NA	%
Revegetation (overall rating)	1,200		80
Drill Seeding (acres)	1,200		80
Aerial Seeding (acres)	400		70
Transplant Seedlings (acres)		✓	
Other: Broadcast seeding, ATV (acres)		✓	
Protective Fence to Exclude Livestock (miles)		✓	
Fence Repair to Exclude Livestock (miles)	1		100
Soil/Watershed Structures (overall rating)		✓	
Retention dams/structures (number)		✓	
Ripping, contour furrows, etc.		✓	
Matting, watershed cover, etc.		✓	
Noxious Weed Control (acres)	150		90
Other		✓	

**Risk of Resource Value Loss or Damage**

Identify the risk (high, medium, low, none or not applicable (NA)) of unacceptable impacts or loss of resources.

<b>No Action - Treatments Not Implemented (check one)</b>					
Resource Value	NA	None	Low	Mid	High
Unacceptable Loss of Topsoil				✓	
Weed Invasion					✓
Unacceptable Loss of Vegetation Diversity				✓	
Unacceptable Loss of Vegetation Structure				✓	
Unacceptable Disruption of Ecological Processes			✓		
Off-site Sediment Damage to Private Property		✓			
Off-site Threats to Human Life		✓			
Other -	✓				

<b>Alternative 1</b>					
Resource Value	NA	None	Low	Mid	High
Unacceptable Loss of Topsoil				✓	
Weed Invasion					✓
Unacceptable Loss of Vegetation Diversity				✓	
Unacceptable Loss of Vegetation Structure				✓	
Unacceptable Disruption of Ecological Processes			✓		
Off-site Sediment Damage to Private Property		✓			
Off-site Threats to Human Life		✓			
Other -	✓				

<b>Proposed Action - Treatments Successfully Implemented (check one)</b>					
Resource Value	NA	None	Low	Mid	High
Unacceptable Loss of Topsoil			✓		
Weed Invasion			✓		
Unacceptable Loss of Vegetation Diversity			✓		
Unacceptable Loss of Vegetation Structure			✓		
Unacceptable Disruption of Ecological Processes			✓		
Off-site Sediment Damage to Private Property		✓			
Off-site Threats to Human Life		✓			
Other -	✓				

### **SUMMARY**

The costs of the project and probability of success of the proposed treatments are compared with the risks to resource values if: 1) no action is taken, and 2) the proposed action is successfully implemented. Alternatives may be included in this analysis to assist in the selection of the treatments that will cost effectively achieve the EFR objectives. Answer the following questions to determine which proposed EFR treatments should be selected and implemented.

1. Are the risks to natural resources and private property acceptable as a result of the fire if the following actions are taken?

**Proposed Action** Yes ✓ , No

Rational for answer:

The risks of seeding using rangeland drill and helicopter would be minimal to existing natural resources on public land and none to private lands. The major concern is the spread of cheatgrass, yellow starthistle, and diffuse knapweed which is present within and adjacent to the burned area. This action would help retard the expansion of cheatgrass, yellow starthistle, and diffuse knapweed while restoring vegetation diversity and structure to the burned area.

**No Action** Yes , No ✓

Rational for answer:

The lack of any weed control (seeding) would allow a rapid re-establishment and possible expansion of yellow starthistle and diffuse knapweed in the burned area which may accelerate the spread to adjacent federal and private lands. The repair of damaged fences is needed to protect the burned area by excluding livestock from adjacent private lands. No action, may create greater future costs in trying to control the weeds and loss of wildlife habitat and livestock forage.

**Alternative 1** Yes , No ✓

Rational for answer:

repairing the damaged fences would protect the area from grazing for natural regeneration, however as stated in the

No Action alternative, the lack of any weed control (seeding) would allow a rapid expansion of yellow starthistle and diffuse knapweed to adjacent federal and private lands.

2. Is the probability of success of the proposed action, alternatives or no action acceptable given their costs?

**Proposed Action** Yes ☒ , No

Rational for answer:

If the seed can be applied before the end of February there is a very good chance it would establish and retard the expansion of yellow starthistle and diffuse knapweed.

**No Action** Yes , No ☒

Rational for answer:

This alternative would save money now, but may cost more in the future for weed control and loss of wildlife habitat and livestock forage. Also, this may encourage a more rapid noxious weed spread to adjacent public and private lands which would not make the BLM a "good" neighbor.

**Alternative 1** Yes , No ☒

Rational for answer:

Same as the No Action Alternative.

3. Which approach will most cost effectively and successfully attain the EFR objectives and therefore is recommended for implementation from a Cost/Risk Analysis standpoint?

**Proposed Action** ☒ , Alternative , or No Action

Comments: As explained under numbers 1. and 2. above, if the seeding can be implemented before February 15.

/s/ Craig Obermiller

10/16/00

Responsible Official

Date

Lower John Day Team

Review and Concurrence:

/s/ Scott Cooke for

10/16/00

Danny L. Tippy

Date

Field Manager

Central Oregon Resource Area

## NATIVE/NON-NATIVE PLANT WORKSHEET

Horn Butte Fire N352

### **Proposed Native Plants in Seed Mixture**

1. Are the native plants proposed for seeding adapted to the ecological sites in the burned area?

Yes ☒ , No

Rationale: All plants are known to grow within the precipitation zone and soil types that occur in the rehabilitation area.

2. Is seed or seedlings of native plants available in sufficient quantity for the proposed project?

Yes ☒ , No

Rationale: Limited availability of some native seed species have caused prices to rise somewhat as compared to earlier in the year. The quantity needed for this fire rehabilitation plan does not appear to be a concern at this time.

3. Is the cost and/or quality of the native seed reasonable given the project size and Land Use and Rehabilitation Plan objectives and the guidance in BLM Manual 1745?

Yes ☒ , No

Rationale: The quality of some of the seed has already been determined to be satisfactory by the Interagency Seed Warehouse in Boise, ID. Those species that are not available from seed warehouse will be purchased from other vendors. Once seed is received from vendors and additional seed test will be performed to determine purity and germination. Prices of native species are modestly high, but reasonable.

4. Will the native plants establish and survive given the environmental conditions and the current or future competition from other species in the seed mix or from exotic plants?

Yes ☒ , No

Rationale: Depending on environmental conditions during the spring and early summer, native plants should become established. Future competition from exotic plants will occur, as with the case of areas of yellow starthistle, but similar seedings have shown positive results.

5. Will the current or proposed land management (livestock, recreation use, wildlife populations, etc.) after the seeding establishment period maintain the seeded native plants in the seed mixture?

Yes ☒ , No

Rationale: Grazing in the seeded areas will be excluded for two years.

**Native Plants:**

Sand Dropseed (*Sporobolus cryptandrus*)

Bluebunch Wheatgrass (*Agropyron spicata* var. Whitmar and Secar)

Thickspike Wheatgrass (*Agropyron dasystachyum*, cultivar Bannock)

Sherman Big Bluegrass (*Poa ampla*, cultivar Sherman)

Basin Wildrye (*Elymus cinereus*, cultivar Magnar and/or Trailhead)

Antelope Bitterbrush (*Purshia tridentata*)

Big Sagebrush (*Artemisia tridentata wyomingensis*, *Artemisia tridentata*)

**Non-native Plants:**

None

# FINDING OF NO SIGNIFICANT IMPACT

Horn Butte Fire (N352)  
Emergency Fire Rehabilitation Plan  
and  
Environmental Assessment (EA) OR-054-01-001  
Prineville District, Bureau of Land Management  
Central Oregon Resource Area

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## Summary of Proposed Action and Alternative

An interdisciplinary team of resource specialists at the Prineville District BLM has analyzed a proposed action to implement an Emergency Fire Rehabilitation Plan consisting of seeding, herbicide application and fence repair. Both a second alternative and a no-action alternative were considered.

## FONSI Determination

Based on information contained in the EA, and other available information, it is my determination that none of the alternatives would constitute a major federal action significantly affecting the quality of the human environment. My reasons for this determination are:

- There would be no significant irreversible or irretrievable commitment of resources.
- There would be no significant, adverse impacts to water quality or stream channel morphology.
- There would be no identified impacts or issues related to public health or safety.
- Cultural resources would not be expected to be impacted.
- There would be no impact on Threatened, Endangered or Sensitive plants or animals within the affected area.
- Wetlands and flood plains do not exist in the area, and would therefore not be impacted.
- The proposed action is not part of any other action having potential for cumulatively significant impacts to the important or relevant resource values for the area involved.

An Environmental Impact Statement is therefore unnecessary and will not be prepared. The proposed action and alternatives are consistent with the existing Two Rivers Resource Management Plan and Record of Decision, dated June 1986, as well as the Horn Butte Long-billed Curlew Management Plan and Record of Decision, dated March 1989.

Approved:

/s/ Scott Cooke for

Danny L. Tippy

Field Manager / Central Oregon Resource Area

10/16/00

Date